REMARKS

Claims 1-12 are pending in this application. Claim 4 is withdrawn. Claims 1, 2, 3, and 5-12 are under consideration. Claims 1, 5, 6, 7, and 9 are amended herein. Support for the amendments to the claims may be found in the claims as originally filed. Reconsideration is requested based on the foregoing amendment and the following remarks.

Information Disclosure Statement:

The Applicants filed an Information Disclosure Statement on November 3, 2008, or after the mailing date of the subject Office Action. The Applicants request respectfully that a signed, initialed copy of the Form PTO-1449 submitted with the IDS be returned with the next communication from the Office.

Objection to the Title:

The Title was subjected to as inadequately descriptive. A new, more descriptive Title accompanies this response. Withdrawal of the objection is earnestly solicited.

Claim Rejections - 35 U.S.C. § 102:

Claims 1, 2, 8, 10, and 11 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,642,168 to Masaki (hereinafter "Masaki"). The rejection is traversed to the extent it would apply to the claims as amended. Reconsideration is earnestly solicited.

The fifth clause of claim 1 recites:

> Output in sequence the low-resolution whole picture data and the high-resolution partial image data at a speed equal to or greater than the video rate.

Masaki neither teaches, discloses, nor suggests outputting "the low-resolution whole picture data and the high-resolution partial image data at a speed equal to or greater than the video rate," as recited in claim 1. In Masaki, rather, an operator *designates* the picture element P_1 at the coordinate (0, 0) as a specific picture element. In particular, as described in column 8, lines 8-13:

> As the high resolution picture 25 is stored in the RAM 7 of the picture converter 2 according to the process of FIG. 5, an operator designates through the operation unit 5 the picture element P_1 at the coordinate (0, 0) as a specific picture element, and "8" as the sampling intervals SPX and SPY.

Since, in Masaki, an operator designates the picture element P_1 at the coordinate (0, 0) as a specific picture element, Masaki is not outputting "the low-resolution whole picture data and the high-resolution partial image data at a speed equal to or greater than the video rate," as recited in claim 1.

Masaki, moreover, produces a picture 26a in which the whole of the high resolution picture 25 is *converted* into a low resolution, not "the low-resolution whole picture data and the high-resolution partial image data," as recited in claim 1. In particular, as described at column 8, lines 17, 18, and 19:

> Accordingly, there is produced a picture 26a in which the whole of the high resolution picture 25 is converted into a low resolution.

Since Masaki produces a picture 26a in which the whole of the high resolution picture 25 is converted into a low resolution, Masaki is not outputting "the low-resolution whole picture data and the high-resolution partial image data at a speed equal to or greater than the video rate," as recited in claim 1.

The picture processor 3 of Masaki, moreover, reads the *low* resolution picture 26a to *extract* a picture 27a of the QFP, and computes a position (Xc, Yc) of a picture element C_0 located at a center of the picture 27a. In particular, as described at column 8, lines 21-24:

> The picture processor 3 reads the low resolution picture 26a to extract a picture 27a of the QFP, and computes a position (Xc, Yc) of a picture element C_0 located at a center of the picture 27a.

Since the picture processor 3 of Masaki reads the low resolution picture 26a to extract a picture 27a of the QFP, and computes a position (Xc, Yc) of a picture element C_0 located at a center of the picture 27a, Masaki is not outputting "the low-resolution whole picture data and the high-resolution partial image data at a speed equal to or greater than the video rate," as recited in claim 1.

In Masaki, moreover, the operator selects a picture element F_0 corresponding to the displayed picture element C_0 as a specific picture element *within* the high resolution picture 25, not "the low-resolution whole picture data and the high-resolution partial image data," as recited in claim 1. In particular, as described at column 8, lines 27-31:

> Upon the confirmation of the display, the operator selects a picture element F_0 corresponding to the displayed picture element C_0 as a specific picture element

> within the high resolution picture 25 to enter the coordinates (8·Xc, 8·Yc) through the operation unit 5.

Since the operator of Masaki selects a picture element F0 corresponding to the displayed picture element C0 as a specific picture element within the high resolution picture 25 to enter the coordinates (8*Xc, 8*Yc) through the operation unit 5 upon the confirmation of the display, Masaki is not outputting "the low-resolution whole picture data and the high-resolution partial image data at a speed equal to or greater than the video rate," as recited in claim 1.

Moreover, in Masaki, picture data in a section R1 including a right-and-lower quarter of the picture of the QFP is extracted and applied to the picture processor 3. In particular, as described at column 8, lines 31-35:

> As the operator further enters "1" as sampling intervals SPX and SPY, picture data in a section R1 including a right-and-lower quarter of the picture of the QFP is extracted and applied to the picture processor 3.

Since, in Masaki, picture data in a section R1 including a right-and-lower quarter of the picture of the QFP is extracted and applied to the picture processor 3, Masaki is not outputting "the low-resolution whole picture data and the high-resolution partial image data at a speed equal to or greater than the video rate," as recited in claim 1.

Masaki, finally, designates a specific picture element and a sampling interval for extracting a predetermined picture element within the *high* resolution picture, and processes a picture obtained by extracting based on the designated sampling interval picture data including the specific picture element and the corresponding number of picture elements to the predetermined resolution from high resolution picture data. In particular, as described at column 1, lines 52-63:

> According to a first aspect of this invention, there is provided a method for processing a high resolution picture having a higher resolution than a predetermined resolution of a picture which can be processed by a picture processor, in which a specific picture element and a sampling interval for extracting a predetermined picture element within the high resolution picture are designated, and the picture processor processes a picture obtained by extracting based on the designated sampling interval picture data including the specific picture element and the corresponding number of picture elements to the predetermined resolution from high resolution picture data.

Since Masaki designates a specific picture element and a sampling interval for extracting a predetermined picture element within the high resolution picture, and processes a picture

obtained by extracting based on the designated sampling interval picture data including the specific picture element and the corresponding number of picture elements to the predetermined resolution from high resolution picture data, Masaki is not outputting "the low-resolution whole picture data and the high-resolution partial image data at a speed equal to or greater than the video rate," as recited in claim 1.

In the claimed invention, the cutting position of the-resolution partial picture in the next frame is determined automatically on the basis of the low-resolution whole picture in the current frame of the image signal. The sixth clause of claim 1, in particular, recites:

> An image processing unit which automatically determines the extracting position of the high-resolution partial picture at the next frame, based on the low-resolution whole picture data output from the low-resolution whole picture scanning unit, to thereby instruct the high-resolution partial picture scanning unit on the extracting position.

Masaki neither teaches, discloses, nor suggests "an image processing unit which automatically determines the extracting position of the high-resolution partial picture at the next frame, based on the low-resolution whole picture data output from the low-resolution whole picture scanning unit, to thereby instruct the high-resolution partial picture scanning unit on the extracting position," as recited in claim 1. In Masaki, rather, the *operator* selects a picture element F_0 corresponding to the displayed picture element C_0 as a specific picture element within the high resolution picture 25 to enter the coordinates (8·Xc, 8·Yc) through the operation unit 5 upon the confirmation of the display, as discussed above.

In Masaki, moreover, although designated data may be automatically transmitted to the picture converter 2 from the picture processor 3 based on *previously* taught data, Masaki has no "image processing unit which automatically determines the extracting position of the high-resolution partial picture at the next frame" as recited in claim 1. In particular, as described at column 8, lines 66 and 67, continuing at column 9, lines 1, 2, and 3:

> Though data about a specific picture element and a sampling interval is entered through the operation unit 5 in this embodiment, such designated data may be automatically transmitted to the picture converter 2 from the picture processor 3 based on previously taught data.

Although, in Masaki, designated data may be automatically transmitted to the picture converter 2 from the picture processor 3 based on previously taught data, Masaki has no "image processing unit which automatically determines the extracting position of the high-resolution

partial picture at the next frame, based on the low-resolution whole picture data output from the low-resolution whole picture scanning unit, to thereby instruct the high-resolution partial picture scanning unit on the extracting position," as recited in claim 1. Claim 1 is submitted to be allowable. Withdrawal of the rejection of claim 1 is earnestly solicited.

Claims 2, 8, 10, and 11 depend from claim 1 and add further distinguishing elements. Claims 2, 8, 10, and 11 are thus also submitted to be allowable. Withdrawal of the rejection of claims 2, 8, 10, and 11 is also earnestly solicited.

Claim Rejections - 35 U.S.C. § 103:

Claims 3, 5, and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Masaki in view of U.S. Patent No. 5,262,871 to Wilder et al. (hereinafter "Wilder"). The rejection is traversed to the extent it would apply to the claims as amended. Reconsideration is earnestly solicited.

Claims 3, 5, and 6 depend from claim 1 and add further distinguishing elements. Masaki neither teaches, discloses, nor suggests outputting "the low-resolution whole picture data and the high-resolution partial image data at a speed equal to or greater than the video rate," or "image processing unit which automatically determines the extracting position of the high-resolution partial picture at the next frame, based on the low-resolution whole picture data output from the low-resolution whole picture scanning unit, to thereby instruct the high-resolution partial picture scanning unit on the extracting position" as discussed above with respect to the rejection of claim 1. Wilder does not either, and thus cannot make up for the deficiencies of Masaki with respect to claims 3, 5, or 6 in any case.

Wilder, rather, limits the readout of images to areas of interest by addressing pixels located in the selected regions of interest randomly. In particular, as described in the Abstract:

> An image sensor comprised of an array of photo elements (pixels) includes a device for randomly addressing individual pixels and a device for selectively varying the number of pixels which can be read out on any one reading cycle. The random addressing of pixels enables the readout of pixels located in selected regions of interest. Limiting the readout of the images to areas of interest allows an increase in the frame rate of the images.

Since Wilder limits the readout of images to areas of interest by addressing pixels located in the selected regions of interest randomly, Wilder is not outputting "the low-resolution whole picture data and the high-resolution partial image data at a speed equal to or greater than

the video rate," and Wilder has no "image processing unit which automatically determines the extracting position of the high-resolution partial picture at the next frame, based on the low-resolution whole picture data output from the low-resolution whole picture scanning unit, to thereby instruct the high-resolution partial picture scanning unit on the extracting position" and thus cannot make up for the deficiencies of Masaki with respect to claims 3, 5, or 6. Thus, even if Masaki and Wilder were combined as proposed in the Office Action, claims 3, 5, and 6 would not result. Claims 3, 5, and 6 are submitted to be allowable. Withdrawal of the rejection of claims 3, 5, and 6 is earnestly solicited.

Claim 12:

Claim 12 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Masaki in view of the section of the subject application entitled Description of the Related Art (hereinafter "Related Art"). The rejection is traversed to the extent it would apply to the claims as amended. Reconsideration is earnestly solicited.

Claim 12 depends from claim 1 and adds further distinguishing elements. Masaki neither teaches, discloses, nor suggests outputting "the low-resolution whole picture data and the high-resolution partial image data at a speed equal to or greater than the video rate," or "image processing unit which automatically determines the extracting position of the high-resolution partial picture at the next frame, based on the low-resolution whole picture data output from the low-resolution whole picture scanning unit, to thereby instruct the high-resolution partial picture scanning unit on the extracting position" as discussed above with respect to the rejection of claim 1. The Related Art does not either, and thus cannot make up for the deficiencies of Masaki with respect to claim 12 in any case. Thus, even if Masaki and the Related Art were combined as proposed in the Office Action, claim 12 would not result. Claim 12 is the submitted to be allowable. Withdrawal of the rejection of claim 12 is earnestly solicited.

Allowable Subject Matter:

The Applicant acknowledges with appreciation the indication that claims 7 and 9 contain allowable subject matter. Claim 7 has consequently been amended to include substantially the subject matter of claim 1, while claim 9 has been amended to include substantially the subject matter of claims 1, 3, and 6. Claims 7 and 9 are thus submitted to be allowable..

Conclusion:

Accordingly, in view of the reasons given above, it is submitted that all of claims 1, 2, 3, and 5-12 are allowable over the cited references. Allowance of all claims 1, 2, 3, and 5-12 and of this entire application is therefore respectfully requested.

Finally, if there are any formal matters remaining after this response, the Examiner is invited to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing this Amendment, please charge them to our Deposit Account No. 19-3935.

Respectfully submitted,

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